Title (en)

OPTICAL DUST DETECTOR ASSEMBLY

Publication

EP 0200553 A3 19880113 (EN)

Application

EP 86303322 A 19860501

Priority

- JP 9476585 A 19850501
- JP 19332485 A 19850902

Abstract (en)

[origin: US4748336A] An optical dust detector assembly includes an air duct member having an introductory portion and a base portion for permitting a flow of air passing therethrough, the duct member having a pair of radial holes formed in its peripheral wall, a pair of cylindrical casings secured to the peripheral wall of the duct member at both sides thereof and having respective opening ends communicating with the interior of the duct member through the respective radial holes thereof, a light emission element arranged within one of the casings to emit a light beam and pass it through the radial holes toward the other casing, and a light receiving element arranged within the other casing to receive the light beam emitted from the light emission element and passed through the radial holes. The air duct member is bent in such a manner as to form therein an inclined internal surface for deflecting upwardly the flow of air introduced through the introductory portion, and the radial holes are formed in a peripheral wall of the base portion of the duct member to face the flow of air deflected by the inclined internal surface so that foreign particles like rain or snow are not deflected upward toward the optical detector.

IPC 1-7

G01N 21/53; G01N 1/24

IPC 8 full level

G01N 1/00 (2006.01); **G01N 21/53** (2006.01); F02B 3/06 (2006.01)

CPC (source: EP US)

G01N 21/534 (2013.01 - EP US); F02B 3/06 (2013.01 - EP US); G01N 1/22 (2013.01 - EP US)

Citation (search report)

- [A] DE 3418611 A1 19841122 - NIPPON DENSO CO [JP]
- [A] SOVIET INVENTIONS ILLUSTRATED, section R, week C12, April 30, 1980, DERWENT PUBLICATIONS LTD., London, R16; & SU-A-673 890 (AS UKR GAS INST)

Cited by

FR3035511A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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EP 86303322 A 19860501; DE 3676221 T 19860501; US 85816886 A 19860501